

In the Claims:

Please change the claim status to the following:

1. (cancelled)

2. (cancelled)

3. (withdrawn) A system for selection and transport of objects out of a flow of a plurality of objects in an operation area, the system comprising:

a system for detecting objects from the flow of the plurality of objects present in the operation area;

an operating system comprising a computer memory for storing information on the objects present in the operation area, means for defining a transport direction of each object in the operation area, and means for defining a plurality of passageways along the transport direction of each object; and

an industrial robot comprising a manipulator operative to extract an object from the flow of the plurality of objects and move the extracted object in the transport direction.

4. (withdrawn) The system according to claim 3, wherein the operating system further comprises means for calculating the presence of other objects penetrating into each of said passageways.

5. (withdrawn) The system according to claim 3, further comprising:
a transport system for continuous flow of the objects.
6. (withdrawn) The system according to claim 3, wherein the transport system transports the products in a horizontal direction.
7. (withdrawn) The system according to claim 3, wherein the transport system comprises a conveyor belt.
8. (withdrawn) The system according to claim 3, wherein the operating system further comprises means for selecting a certain type of object from among the plurality of objects.
9. (withdrawn) The system according to claim 3, wherein the passageways comprise tunnels.
10. (withdrawn) The system according to claim 3, wherein the system for detecting objects comprises a vision system.
11. (currently amended) A method of selecting an object out of a plurality of objects moving in a product flow direction in an operation area for transport to a predetermined location, the method comprising:
detecting the plurality of moving objects present in the operation area and moving in the product flow direction;

~~storing object and location information in a computer memory;~~

selecting an object to be picked from the plurality of moving objects in the operation area, wherein selecting the object comprises

defining a ~~transport~~ sort direction for each of the plurality of moving objects present in the operation area, wherein the sort direction is at an angle to the flow direction,

defining a passageway along the ~~transport~~ sort direction of each of said plurality of moving objects,

determining whether any other of said plurality of moving objects penetrates each passageway for each of said plurality of moving objects, and

selecting an object from said plurality of moving objects for which the defined passageway is free from penetration of any other of said plurality of objects, and

picking moving the selected object from the plurality of moving objects by moving the selected object in the defined passageway along in the ~~transport~~ sort direction for transport to the predetermined location.

12. (previously amended) The method according to claim 11, further comprising:
picking the selected object prior to moving the selected object.

13. (previously presented) The method according to claim 12, wherein the object is picked without disturbing other objects in the operation area.

14. (currently amended) The method according to claim 11, wherein ~~the objects are moved horizontally along the sort transport direction~~ is in a direction perpendicular to the flow direction.

15. (currently amended) The method according to claim 14, wherein the ~~objects are moved in a~~ product flow direction is circular ~~direction~~.

16. (currently amended) The method according to claim 11, wherein ~~the objects are moved vertically along the transport direction~~ product flow direction is vertical.

17. (previously presented) The method according to claim 11, further comprising:
determining information regarding the objects, the information comprising size, position, speed, or orientation.

18. (currently amended) The method according to claim 12, wherein the selected object is picked without disturbing other objects in the operation area.

19. (previously presented) The method according to claim 11, wherein selecting the object further comprises
selecting an optimal object based upon speed of the objects.

20. (currently amended) The method according to claim 11, further comprising:
repeatedly moving the objects in the flow direction through the operation area.

21. (currently amended) The method according to claim 11, wherein the flow direction ~~and transport direction are perpendicular to each other~~ is horizontal.